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Malnutrition and birth related determinants among children in Qazvin, Iran

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Background: Little is known about the effect of birth weight, birth order and number of siblings on the nutritional status in children in Iran, especially in Qazvin province. The aim of this study was to provide the current data on malnutrition and birth related determinants among children in Qazvin, Iran.

Methods: This study was conducted in six cities of Qazvin province (Iran), during December 2009–December 2010. Data on age, weight and height were taken and birth weight, number of children in family, birth order, parental career and educational state and family caretaker were collected by a questionnaire that a trained team filled in. Sample size was1351, almost 225 children under 6-years-old from each city participated in the study (692 boys and 659 girls). In each city, subjects were randomly selected among children who had profiles at health centers.

Results: The overall prevalence of wasting, stunting and underweight was 10.3%, 5.8% and 4.8% respectively. There was association between 'birth weight' and wasting ($P=0.022$), stunting ($P=0.032$) and underweight ($P<0.001$). A non-significant association was obtained between factors 'number of children at home' and 'birth order' with wasting, stunting and underweight.

Conclusion: These data suggest that birth weight can influence malnutrition indicators; therefore, knowing risk factors of malnutrition in population subgroups is important for planners in country because it helps the future studies concentrate on the most determining ones.